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Related Pending Application Related Case Serial No: 09/8 Selated Case Filing Date: 06-

WHAT IS CLAIMED IS:



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- 1. A data communication device that is connected to a central management device through a communication line, and controls communication between said central management device and an image-forming device, said data communication device comprising:
 - a power source;
- a data-storing unit storing data related to said image-forming device;
 - a data transmission unit:
- 15 a transmission-request generating unit being always supplied with electricity from said power source, and generating a transmission request that requests for transmission of the data to said central management device; and
- 20 a power-supply control unit being always supplied with the electricity from said power source, and supplying the electricity from said power source to a communication-related part including said data transmission unit, if said transmission-request
- 25 generating unit generates the transmission request,

wherein said data transmission unit transmits the data to said control management device if being supplied with the electricity from said power source.

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2. The data communication device as claimed in claim 1, wherein said power-supply control unit stops supplying the electricity from said power source to said communication-related part, after said data transmission unit completes transmitting the data related to said image-forming device to said central management device.

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- 3. The data communication device as claimed in claim 1, wherein said transmission-request generating 20 unit includes:
 - a time generating unit generating a current time; and
- a time comparing unit comparing the current
 time with a predetermined data-transmission time, and
 25 generating the transmission request if deciding that the

current time matches with the data-transmission time.

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4. The data communication device as claimed in claim 1, wherein said transmission-request generating unit includes:

a time generating unit generating a current 10 time;

a data deciding unit comparing the current time with a predetermined data-transmission time, and deciding whether the data related to said image-forming device is stored in said data-storing unit if deciding that current time matches with the data-transmission time; and

a transmission requesting unit generating the transmission request if said data deciding unit decides that the data related to said image-forming device is stored in said data-storing unit.

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5. The data communication device as claimed

in claim 1, wherein said transmission-request generating unit includes:

- a time generating unit generating a current time:
- a data deciding unit deciding whether the data related to said image-forming device is stored in said data-storing unit; and
- a time comparing unit comparing the current time with a predetermined data-transmission time

 10 corresponding to the data related to said image-forming device if said data deciding unit decides that the data related to said image-forming device is stored in said data-storing unit, and generating the transmission request if deciding that the current time matches with the data-transmission time.

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- 6. The data communication device as claimed in claim 1, wherein said transmission-request generating unit includes:
 - a time generating unit generating a current time;
- a data deciding unit deciding whether the data

related to said image-forming device is stored in said data-storing unit;

a time setting unit setting a transmission time corresponding to the data related to said imageforming device, if said data deciding unit decides that the data related to said image-forming device is stored in said data-storing unit; and

a time comparing unit comparing the current time with the transmission time, and generating the transmission request if deciding that the current time matches with the transmission time.

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7. The data communication device as claimed in claim 1, further comprising a call-origin deciding unit being always supplied with the electricity from said power source, and deciding whether a call origin is said central management device based on a signal received continuously after a call signal, if receiving the call signal from said communication line in accordance with a call out made by the call origin,

wherein said power-supply control unit is
25 always supplied with the electricity from said power

source, and supplies the electricity from said power source to said communication-related part if said callorigin deciding unit decides that the call origin is said central management device, and

wherein said data transmission unit transmits the data related to said image-forming device to said control management device if being supplied with the electricity from said power source.

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8. The data communication device as claimed in claim 7, wherein said power-supply control unit stops supplying the electricity from said power source to said communication-related part, after said data transmission unit completes transmitting the data related to said image-forming device to said central management device.

- 9. The data communication device as claimed in claim 1, further comprising:
- a transmission-request-signal transmitting

unit;

a data writing unit; and

an acquisition-request generating unit being always supplied with electricity from said power source,

and generating an acquisition request that requests for acquisition of the data related to said image-forming device from said image-forming device,

wherein said power-supply control unit supplies the electricity from said power source to said transmission-request-signal transmitting unit and said data writing unit if said acquisition-request generating unit generates the acquisition request, said transmission-request-signal transmitting unit transmits a transmission-request signal to said image-forming 15 device if being supplied with the electricity from said power source, and said data writing unit writes the data related to said image-forming device in said datastoring unit if receiving the data related to said image-forming device from said image-forming device in 20 response to said transmission-request signal after being supplied with the electricity from said power source.

10. The data communication device as claimed in claim 9, wherein said power-supply control unit stops supplying the electricity from said power source to said transmission-request-signal transmitting unit and said data writing unit, after said data writing unit completes writing the data related to said image-forming device in said data-storing unit.

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- 11. The data communication device as claimed in claim 9, wherein said acquisition-request generating unit includes:
- a time generating unit generating a current time; and
- a time comparing unit comparing the current time with a predetermined data-acquisition time, and generating the acquisition request if deciding that the current time matches with the data-acquisition time.

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12. The data communication device as claimed

in claim 7, further comprising:

- a data-type deciding unit; and
- a transmission-request-signal transmitting unit,
- wherein said power-supply control unit
 supplies the electricity from said power source to said
 data-type deciding unit and said transmission-requestsignal transmitting unit if said call-origin deciding
 unit decides that the call origin is the central
 management device,

wherein said data-type deciding unit decides a type of data that should be transmitted to said central management device based on said signal received continuously after the call signal from said

communication line, after being supplied with the electricity from said power source,

wherein said transmission-request-signal transmitting unit transmits a transmission-request signal to said image-forming device, if and only if said transmission-request-signal transmitting unit is supplied with the electricity from said power source, and said data-type deciding unit decides that said data which should be transmitted to said central management device is the data related to said image-forming device,

25 and

wherein said data transmission unit transmits
the data related to said image-forming device, to said
central management device, if and only if being supplied
with the electricity from said power source and
receiving said data related to said image-forming device
from said image-forming device in response to the
transmission-request signal.

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13. The data communication device as claimed in claim 12, wherein said transmission-request-signal transmitting unit adds information indicating said type decided by said data-type deciding unit, to the transmission-request signal.

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14. The data communication device as claimed in claim 1, further comprising a data writing unit, wherein said power-supply control unit supplies the electricity from said power source if receiving a startup signal starting up said data

communication device from said image-forming device, and said data writing unit writes the data related to said image-forming device in said data-storing unit if being supplied with the electricity from said power source and receiving the data related to said image-forming device from said image-forming device.

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15. The data communication device as claimed in claim 14, wherein said power-supply control unit stops supplying the electricity from said power source to said data writing unit after said data writing unit completes writing the data related to said image-forming device in said data-storing unit.

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16. The data communication device as claimed in claim 14, further comprising a data-type deciding unit,

wherein said power-supply control unit
25 supplies the electricity from said power source to said

data-type deciding unit if receiving the startup signal from said image-forming device, said data-type deciding unit decides a type of the data related to said imageforming device if receiving the data related to said 5 image-forming device from said image-forming device after being supplied with the electricity from said image-forming device, said power-supply control unit supplies the electricity from said power source to said communication-related part if said data-type deciding 10 unit decides that the data received from said imageforming device is data indicating an abnormal condition, and said data transmission unit transmits the data received from said image-forming device to said data communication device if receiving the electricity from 15 the power source.

20 17. The data communication device as claimed in claim 1, wherein said communication line is a public line, and said image-forming device is a copy machine.

18. An image-forming device that is connected to a data communication device, and communicates with a central management device in accordance with control carried out by said data communication device, said image-forming device comprising:

a power source;

a data transmission unit; and

a power-supply control unit being always supplied with electricity from said power source, and supplying the electricity from said power source to a communication-related part including said data transmission unit if receiving a transmission-request signal from said data communication device,

wherein said data transmission unit transmits

15 data related to said image-forming device, to said data

communication device if being supplied with the

electricity from said power source.

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19. The image-forming device as claimed in claim 18, wherein said data related to said image-forming device is data that indicates a total number of images formed by said image-forming device or a

condition of said image-forming device.

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20. The image-forming device as claimed in claim 18, wherein said power-supply control unit stops supplying the electricity from said power source to said communication-related part, after said data transmission unit completes transmitting the data related to said image-forming device, to said data communication device.

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21. The image-forming device as claimed in claim 18, wherein said power-supply control unit supplies the electricity from said power source to a part that needs power supply for acquiring data, which should be transmitted to said central management device among the data related to said image-forming device, if receiving the transmission-request signal from said data communication device.

22. The image-forming device as claimed in claim 21, wherein said power-supply control unit stops supplying the electricity from said power source to said part that needs the power supply for acquiring the data, which should be transmitted to said central management device, after said data transmission unit completes transmitting the data that should be transmitted to said central management device, to said data communication device.

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23. The image-forming device as claimed in

15 claim 21, further comprising a power-supply part setting unit setting the part that needs the power supply for acquiring the data, which should be transmitted to said central management device.

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24. The image-forming device as claimed in claim 18, wherein said data transmission unit transmits data corresponding to information that indicates a type

of data, which should be transmitted to said central management device, and is added to said transmission-request signal, among the data related to said image-forming device, if said data transmission unit is supplied with the electricity from said power source.

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25. The image-forming device as claimed in claim 24, wherein said power-supply control unit stops supplying the electricity from said power source to said communication-related part, after said data transmission unit completes transmitting the data corresponding to the information, to said data communication device.

26. The image-forming device as claimed in claim 24, wherein said power-supply control unit decides the part that needs the power supply for acquiring the data, which should be transmitted to said central management device, based on said information added to the transmission-request signal, and supplies the

electricity from said power source to the part that needs the power supply for acquiring the data, which should be transmitted to said central management device, if receiving the said data-transmission signal from said data communication device.

27. The image-forming device as claimed in claim 26, wherein said power-supply control unit stops supplying the electricity from said main power source to said part that needs the power supply for acquiring the data, which should be transmitted to said central

management device, after said data transmission unit completes transmitting the data corresponding to the information to said data communication device.

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28. The image-forming device as claimed in claim 18, further comprising:

a startup-signal transmitting unit; and

a main switch,

wherein said power-supply control unit is always supplied with the electricity from said power source, and supplies the electricity from said power source to said image-forming device entirely according to an operation of said main switch,

wherein said startup-signal transmitting unit transmits a startup signal to said data communication device to start up said data communication device if being supplied with the electricity from said power source, and

wherein said data transmission unit transmits
the data related to said image-forming device, to said
data communication device after said data transmission
unit is supplied with the electricity from said power

source, and said startup-signal transmitting unit
transmits the startup signal to said data communication
device.

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- 29. The image-forming device as claimed in claim 18, further comprising:
 - a startup-signal transmitting unit; and
- a transmission-request generating unit,

-220wherein said communication-related part further includes said startup-signal transmitting unit, wherein said transmission-request generating unit is always supplied with the electricity from said power source, and generates a transmission request that requests for transmission of the data related to said image-forming device to said data communication device. wherein said power-supply control unit is always supplied with the electricity from said power 10 source, and supplies the electricity from said power source to said communication-related part if said transmission-request generating unit generates the transmission request, wherein said startup-signal transmitting unit 15 transmits a startup signal to said data communication device to start up said data communication device if being supplied with the electricity from said power source, and wherein said data transmission unit transmits 20 the data related to said image-forming device, to said data communication device after said data transmission unit is supplied with the electricity from said power source, and said startup-signal transmitting unit

transmits the startup signal to said data communication

25

device.

30. The image-forming device as claimed in claim 29, wherein said power-supply control unit stops supplying the electricity from said power source to said communication-related part, after said data transmission unit completes transmitting the data related to said image-forming device to said data communication device.

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31. The image-forming device as claimed in claim 29, wherein said power-supply control unit supplies the electricity from said power source to a part that needs power supply for acquiring data, which should be transmitted to said central management device among the data related to said image-forming device, if said transmission-request generating unit generates the transmission request.

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32. The image-forming device as claimed in claim 31, wherein said stops supplying the electricity
25 from said power source to said part that needs the power

supply for acquiring the data, which should be transmitted to said central management device, after said data transmission unit completes transmitting the data that should be transmitted to said central management device, to said data communication device.

33. The image-forming device as claimed in claim 31, further comprising a power-supply part setting unit setting the part that needs the power supply for acquiring the data, which should be transmitted to said central management device.

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- 34. An image-forming device that is connected 20 to a central management device through a communication line, comprising:
 - a power source;
 - a communication control unit controlling ... communication with said central management device;
- a transmission-request generating unit being

always supplied with electricity from said power source, and generating a transmission request that requests for data transmission to said central management device; and

a power-supply control unit being always

supplied with the electricity from said power source,
and supplying the electricity from said power source to
said communication control unit if said transmissionrequest generating unit generates the transmission
request,

wherein said communication control unit transmits data related to said image-forming device to said central management device, if being supplied with the electricity from said power source.

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35. The image-forming device as claimed in claim 34, wherein said central management device is an external device, and said communication line is a public line.

36. The image-forming device as claimed in claim 34, wherein said data related to said image-forming device is data that indicates a total number of images formed by said image-forming device or a condition of said image-forming device.

37. The image-forming device as claimed in claim 34, wherein said power-supply control unit stops supplying the electricity from said power source to said communication control unit, after said communication control unit completes transmitting the data related to said image-forming device to said central management device.

- 38. The image-forming device as claimed in claim 34, wherein said transmission-request generating unit includes:
- a time generating unit generating a current time; and

a time comparing unit comparing the current time with a predetermined data-transmission time, and generating the transmission request if deciding that the current time matches with the data-transmission time.

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39. The image-forming device as claimed in

10 claim 34, further comprising a call-origin deciding unit

being always supplied with the electricity from said

power source, and deciding whether a call origin is said

central management device based on a signal received

continuously after a call signal, if receiving the call

15 signal from said communication line in accordance with a

call out made by the call origin,

wherein said power-supply control unit is always supplied with the electricity from said power source, and supplies the electricity from said power source to said communication control unit if said callorigin deciding unit decides that the call origin is said central management device, and

wherein said communication control unit
transmits the data related to said image-forming device
to said control management device if being supplied with

the electricity from said power source.

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40. The image-forming device as claimed in claim 35, wherein said power-supply control unit stops supplying the electricity from said power source to said communication control unit, after said communication control unit completes transmitting the data related to said image-forming device to said central management device.

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claim 39, wherein said power-supply control unit supplies the electricity from said power source to a 20 part that needs power supply for acquiring data, which should be transmitted to said central management device among the data related to said image-forming device, if said call-origin deciding unit decides that the call

origin is said central management device.

The image-forming device as claimed in

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42. The image-forming device as claimed in claim 41, wherein said power-supply control unit stops supplying the electricity from said power source to said part that needs the power supply for acquiring the data, which should be transmitted to said central management device, after said communication control unit completes transmitting the data that should be transmitted to said central management device, to said central management device.

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43. The image-forming device as claimed in

15 claim 41, further comprising a power-supply part setting

unit setting the part that needs the power supply for

acquiring the data, which should be transmitted to said

central management device.

- 44. The image-forming device as claimed in claim 39, further comprising:
- a data-type deciding unit being supplied with

the electricity from said power source, and deciding a type of data that should be transmitted to said central management device based on the signal received continuously after the call signal from said communication line, if said call-origin deciding unit decides that the call origin is said central management device; and

a power-supply part deciding unit being always supplied with the electricity from said power source,

and deciding a part that needs power supply for acquiring data, which should be transmitted to said central management device among the data related to said image-forming device,

wherein said power-supply control unit

15 supplies the electricity from said power source to a

part decided by said power-supply part deciding unit as
the part that needs power supply for acquiring data,
which should be transmitted to said central management
device, and

wherein said communication control unit
acquires the data that should be transmitted to said
central management device, and transmits the data that
should be transmitted to said central management device,
to said central management device, if being supplied
with the electricity from said power source.

45. The image-forming device as claimed in claim 44, wherein said power-supply control unit stops supplying the electricity from said power source to said communication control unit and said part decided by said power-supply part deciding unit as the part that needs power supply for acquiring data, which should be transmitted to said central management device, if said communication control unit completes transmitting the data that should be transmitted to said central management device.

- 46. An image-forming-device management system, comprising:
 - an image-forming device;
 - a data communication device; and
 - a central management device managing said
- 20 image-forming device remotely through a communication line and said data communication device,

wherein said data communication device includes:

- a first power source;
- a data-storing unit storing data of said

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image-forming device;

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a data-type deciding unit;

a transmission-request-signal transmitting unit;

5 a first data transmission unit;

a call-origin deciding unit being always supplied with the electricity from said first power source, and deciding whether a call origin is said central management device based on a signal received continuously after a call signal if receiving the call signal from said communication line in accordance with a call out made by the call origin; and

supplied with the electricity from said first power

source, and supplying the electricity from said first

power source to said data-type deciding unit, said

transmission-request-signal transmitting unit and said

fist data transmission unit, if said call-origin

deciding unit decides that the call origin is said

central management device,

wherein said data-type deciding unit decides a type of data that should be transmitted to said central management device based on the signal received continuously after the call signal from said communication line, if being supplied with the

transmitting unit transmits a transmission-request
signal to said image-forming device, if and only if said
transmission-request-signal transmitting unit is
supplied with the electricity from said first power
source, and said data-type deciding unit decides that
the data which should be transmitted to said central
management device is the data related to said imageforming device,

wherein said first data transmission unit
transmits the data related to said image-forming device
to said central management device if being supplied with
the electricity from said first power source, and

15 receiving the data related to said image-forming device
from said image-forming device in response to the
transmission-request signal transmitted to said imageforming device by the transmission-request-signal
transmitting unit, and

wherein said first power-supply control unit stops supplying the electricity from said first power source to said data-type deciding unit, said transmission-request-signal transmitting unit and said first data transmission unit, after said first data

25 transmission unit completes transmitting the data

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related to said image-forming device to said central management device,

wherein said image-forming device includes:

- a second power source;
- a second data transmission unit; and

a second power-supply control unit that is always supplied with the electricity from said second power source, and supplies the electricity from said second power source to a communication-related part including said second data transmission unit if receiving the transmission-request signal from said data communication device.

wherein said second data transmission unit transmits the data related to said image-forming device,

to said data communication device if being supplied with the electricity from said second power source, and

wherein said second power-supply control unit stops supplying the electricity from said second power source to said communication-related part after said second data transmission unit completes transmitting the data related to said image-forming device to said data communication device.

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47. The image-forming-device management system as claimed in claim 46,

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wherein said transmission-request-signal transmitting unit of the data communication device adds information indicating the type of the data that should be transmitted to said central management device, to the transmission-request signal, said type being decided by said data-type deciding unit, and

wherein said second power-supply control unit 10 of the image-forming device decides a part that needs power supply for acquiring data that should be transmitted to said central management device based on said information added to the transmission-request signal if receiving the transmission-request signal from said data communication device, and supplies the electricity from said second power source to a part decided by said second power-supply control unit as the part that needs power supply for acquiring the data that should be transmitted to said central management device, 20 and stops supplying the electricity from said second power source to said part decided by said second powersupply control unit as the part that needs power supply for acquiring the data that should be transmitted to said central management device, after said second data 25 transmission unit completes transmitting the data that

should be transmitted to said central management device, to said data communication device.

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48. The image-forming-device management system as claimed in claim 46, wherein said data related to said image-forming device is data that indicates a total number of images formed by said image-forming device or a condition of said image-forming device.

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49. A method of controlling power supply in an image-forming-device management system that remotely manages an image-forming device by using a central management device through a communication line and a data communication device, said method comprising the steps of:

supplying electricity constantly from a power source of said data communication device to call-signal receiving means for receiving a call signal from the communication line according to a call out made by a

call origin, and call-origin deciding means for deciding whether the call origin is said central management device when receiving the call signal by the call-signal receiving means;

supplying the electricity from the power source of said data communication device to a communication-related part if deciding that the call origin is said central management device by said callorigin deciding means, said communication-related part including data-type deciding means for deciding a type of data that should be transmitted to said central management device based on a signal received continuously after the call signal from said communication line, transmission-request signal

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request signal added with information indicating the type of the data that should be transmitted to said central management device, said type being decided by said data-type deciding means, to said image-forming device if recognizing that the data which should be transmitted to said central management device is data related to said image-forming device based on a result of deciding the type of the data that should be transmitted to said central management device, and data

transmission means for receiving data from said image-

-236forming device in response to the transmission-request signal transmitted to said image-forming device, and transmitting the data received from said image-forming device to said central management device; 5 stopping the power supply from said power source to said communication-related part after completing transmission of the data received from said image-forming device to said central management device; supplying the electricity constantly from a 10 power source of said image-forming device to signal receiving means receiving the transmission-request signal from said data communication device: deciding a part that needs the power supply for acquiring the data which should be transmitted to 15 said central management device among the data related to said image-forming device, based on said information added to the transmission-request signal if the transmission-request signal is received by said signal receiving means; 20 supplying the electricity from the power source of said image-forming device to the part that needs the power supply for acquiring the data which should be transmitted to said central management device, and a part that needs the power supply for transmitting 25 the data to said data communication device; and

stopping the power supply from the power source of said image-forming device to the part that needs the power supply for acquiring the data which should be transmitted to said central management device, and the part that needs the power supply for transmitting the data to said data communication device, after transmitting the data to said data communication device.

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50. A method of controlling power supply in an image-forming-device management system that manages

15 an image-forming device by using a central management device through a data communication device, said method comprising the steps of:

supplying electricity constantly from a power source of said data communication device to call-signal receiving means for receiving a call signal from a call origin, and call-origin deciding means for deciding whether the call origin is said central management device when receiving the call signal by the call-signal receiving means, in said data communication device;

supplying the electricity from the power

source of said data communication device to a communication-related part if deciding that the call origin is said central management device;

transmitting a transmission request from said

data communication device to said image forming device
by use of said communication-related part;

receiving data from said image-forming device in response to the transmission request transmitted to said image-forming device;

transmitting the data to said central management device; and

stopping supplying the electricity from said power source to said communication-related part after transmitting the data to said central management device.

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51. The method as claimed in claim 50,20 further comprising the steps of:

supplying the electricity constantly from a power source of said image-forming device to request receiving means receiving the transmission request from said data communication device, in said image forming device;

deciding a first part that needs the power supply for acquiring the data, based on the transmission request if the transmission-request signal is received by said signal receiving means;

supplying the electricity from the power source of said image-forming device to the first part, and a second part that needs the power supply for transmitting the data to said data communication device;

transmitting the data to said data

10 communication device; and

stopping supplying the electricity from the power source of said image-forming device to the first part and the second part after transmitting the data to said data communication device.

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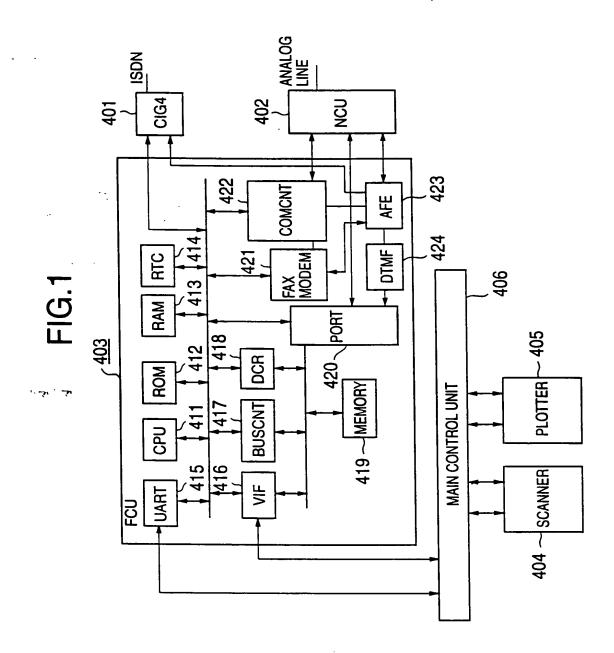
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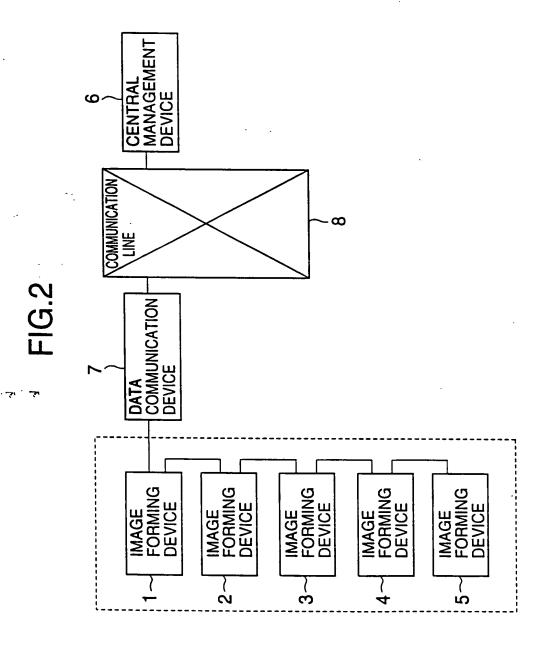
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ABSTRACT OF THE DISCLOSURE

An image-forming-device management system includes an image-forming device, a data communication device and a central management device. A real-time clock circuit (RTC) of the data communication device compares a current time with a predetermined data transmission time. If the current time matches with the data transmission time, the RTC generates a datatransmission request that requests for data transmission 10 to the central management device. A CPU included in a part constantly supplied with electricity from a power source in the data communication device instructs a power-source controller to supply the electricity from the power source to a communication-related part 15 including a network control unit (NCU), a modem and an image-forming-device interface, thereby activating the communication-related part. Subsequently, the CPU calls out the central management device by using the NCU, and

transmits data acquired from the image-forming device in advance, to the central management device by using the modem.





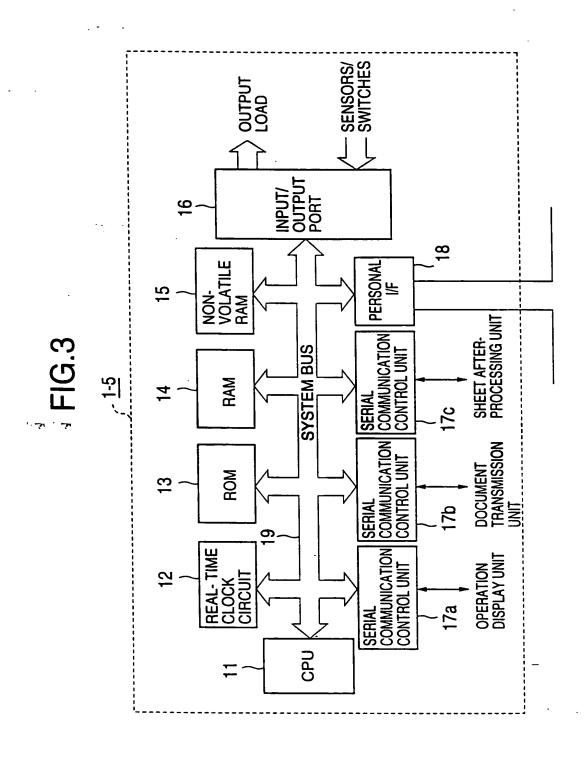
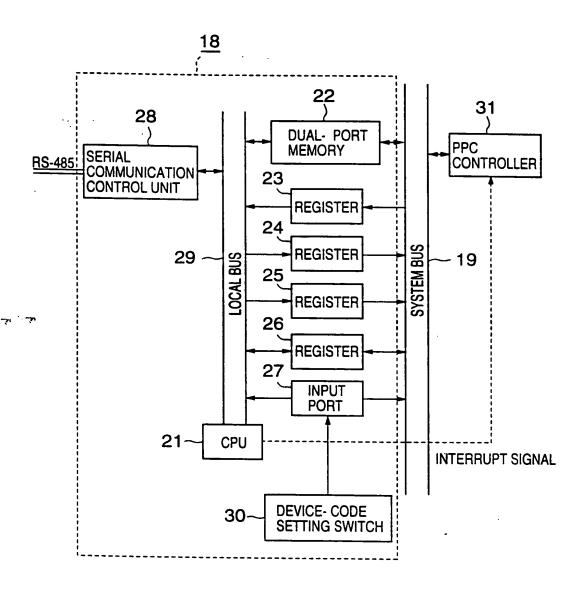


FIG.4



32 83 77 78 79 80 81 71

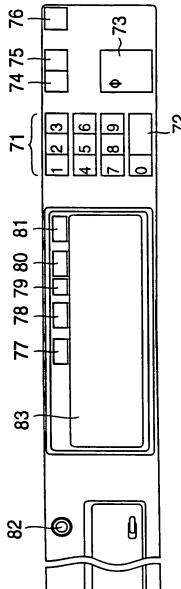
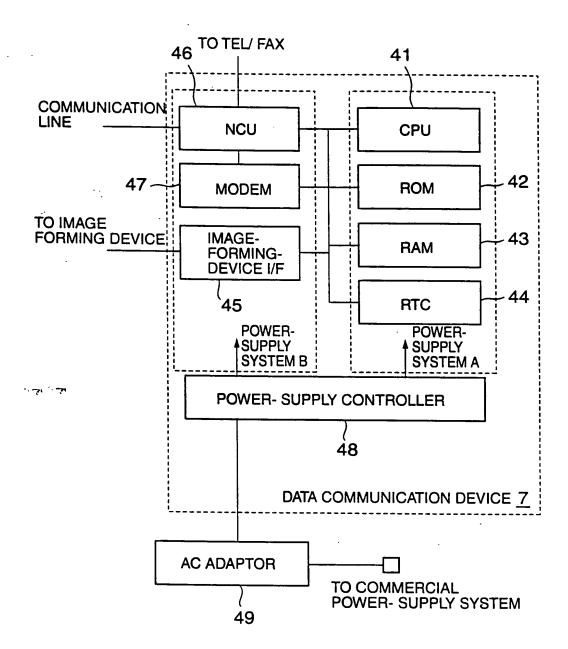


FIG.6

SORTER	BINDING	BOTH SOCK		CHANGE SIZE	ZE	() REANY	READY TO COPY			•
	MARGIN	SIDES			CHANGE)_				_
				83%	MEASUREMENT				1	11110
			A3 R4				A4	B4	- 유	AUTO SHEET
		ONE BOTH	A4 - B5	87%	NOOZ					
		SIDE SIDES	B4 A4	82%	WICO7					ঊ
		HOR HOR		710,	SPECIEV SHEET	LIGHT			DARK	VI ITO OCAIOITA
SORT	BACK	SIDES SIDES	B4 [→] B5	e/						AUTO DENSIT
, 6	•	BOTH ONE	BEDILICE	FXPAND	FOUND SIZE	=				9
SIACK	I NON	SIDES SIDE	וויייססקר			7				

FIG.7



TO TEL/FAX TO MODEM ប \Box LOOP FORMING CIRCUIT 55 LINE SWITCHING CIRCUIT 54 RINGING DETECTING CIRCUIT 23 LOOP. CURRENT DETECTING-CIRCUIT 52 PROTECTION CIRCUIT 51 NCU 46 COMMUNICATION | L2

FIG.8

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FIG.9

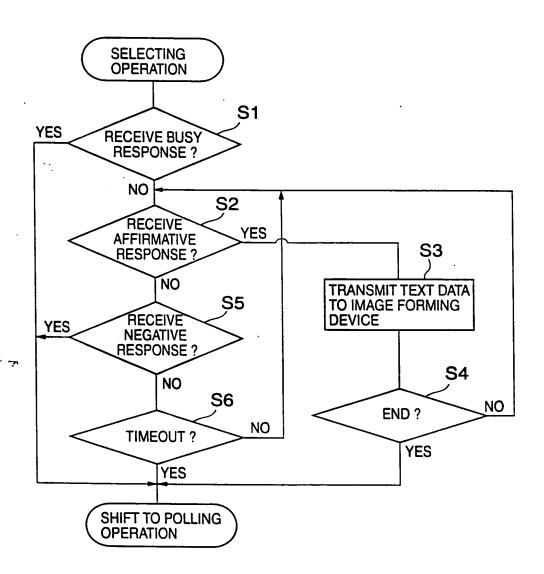
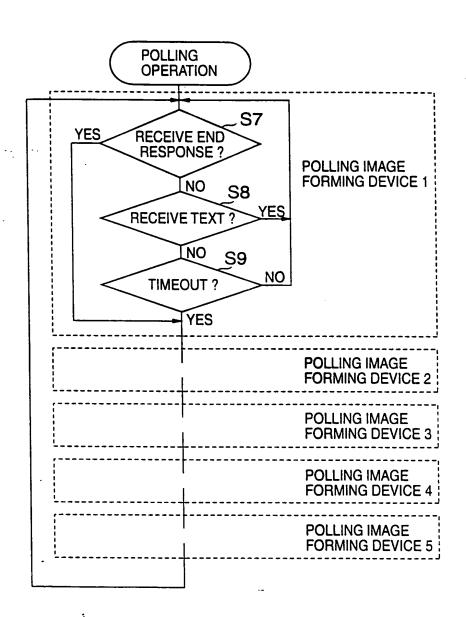


FIG.10



INFORMATION RECORD S S ETB or ETX INFORMATION RECORD DATA PART **TEXT DATA** DIGIT NUMBER OF DATA PART INFORMATION RECORD INFORMATION CODE STX DISTINGUISHING SOH NUMBER ID CODE SYN

CODE	PROCESS NAME	CONTENTS OF PROCESS
30	SC CALL	AUTOMATIC REPORT WHEN SC IS GENERATED
31	MANUAL CALL	AUTOMATIC REPORT WHEN MANUAL SWITCH IS PRESSED
32	ALARM TRANSMISSION	AUTOMATIC REPORT WHEN ALARM IS GENERATED
22	BLOCK BILLING PROCESS	AUTOMATIC REPORT WHEN REACHING BLOCK BILLING NUMBER
05	DATA READING PROCESS	READ INTERNAL DATA OF PPC
8	DATA WRITING PROCESS	REWRITE INTERNAL DATA OF PPC
83	EXECUTION	EXECUTE TESTING, AND ETC BY REMOTE OPERATION
88	DEVICE- CODE CONFIRMATION	PROCESS FOR CHECKING COMMUNICATION FUNCTION

CODE	DATA LENGTH	CONTENTS
INFORMATION CODE	11	CODE INDICATING TYPE OF CONCRETE INFORMATION
DIGIT NUMBER OF DATA PART	2	· INDICATING DATA LENGTH OF DATA PART IN ASCII CODE • *00* IF THERE IS NO DATA PART
DATA PART	VARIABLE	· CONTENTS OF EACH INFORMATION CODE · DATA PART DOES NOT EXIST IF DIGIT NUMBER OF DATA PART IS "00"

INFORMATION RECORD LRC ETB or ETX INFORMATION RECORD DATA PART **TEXT DATA** DIGIT NUMBER OF DATA PART INFORMATION RECORD INFORMATION CODE STX PROCESS CODE NUMBER SG SYN DEVICE CODE

FIG.14

FIG.15

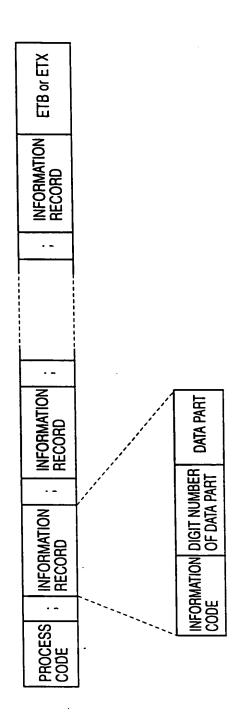


FIG.16

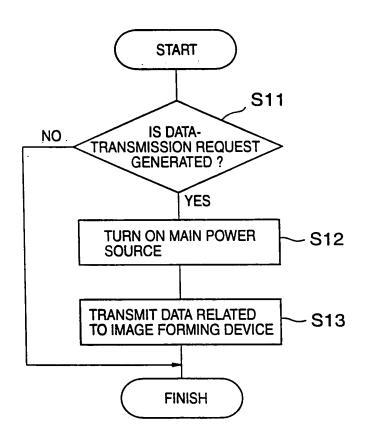


FIG.17

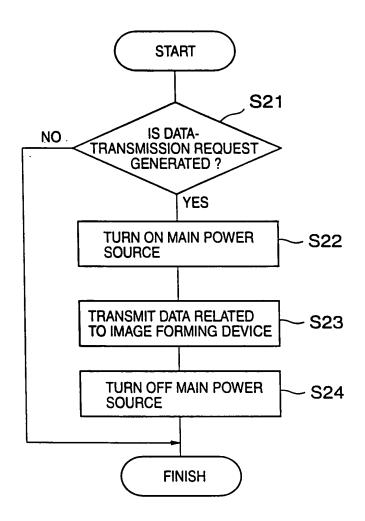


FIG.18

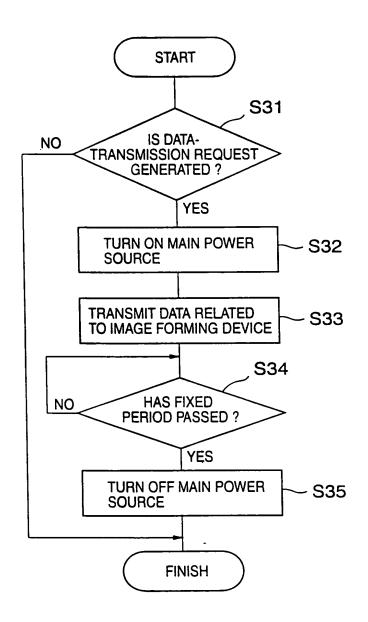
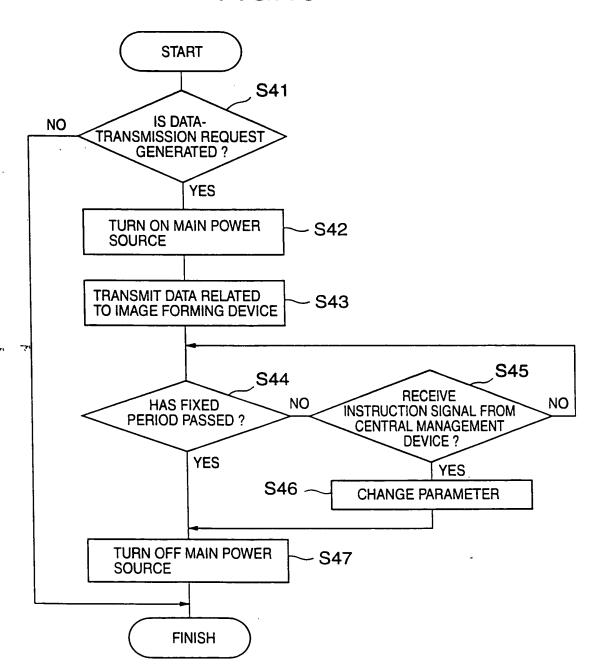


FIG.19



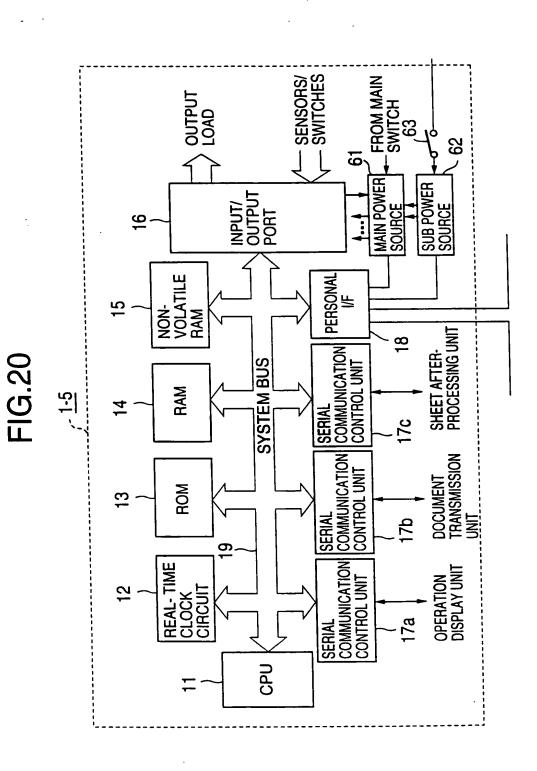
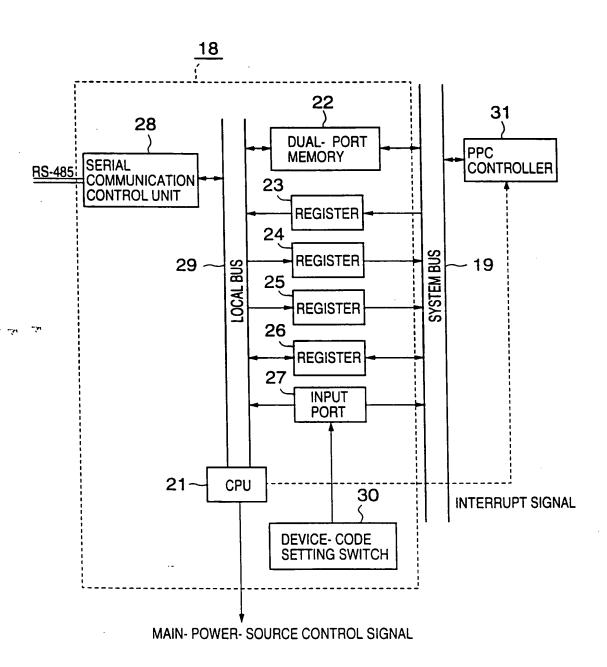


FIG.21



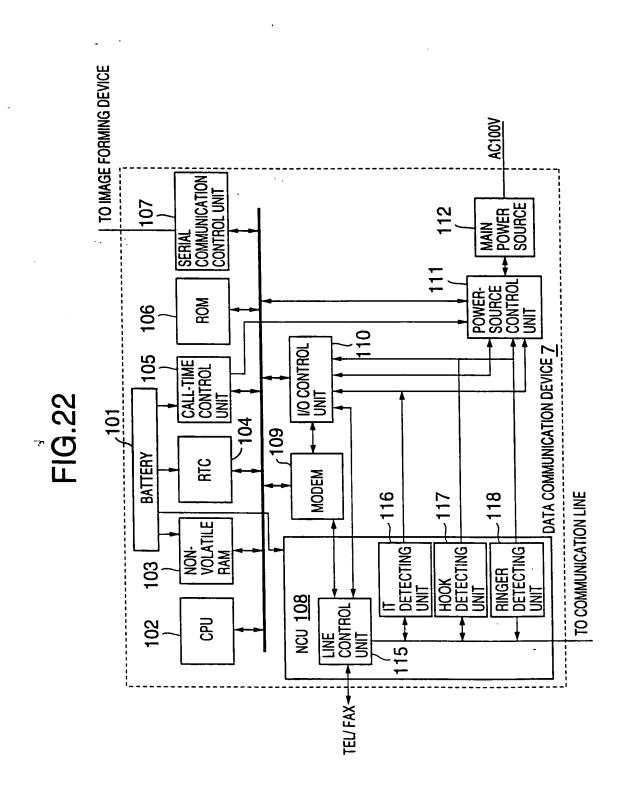


FIG.23

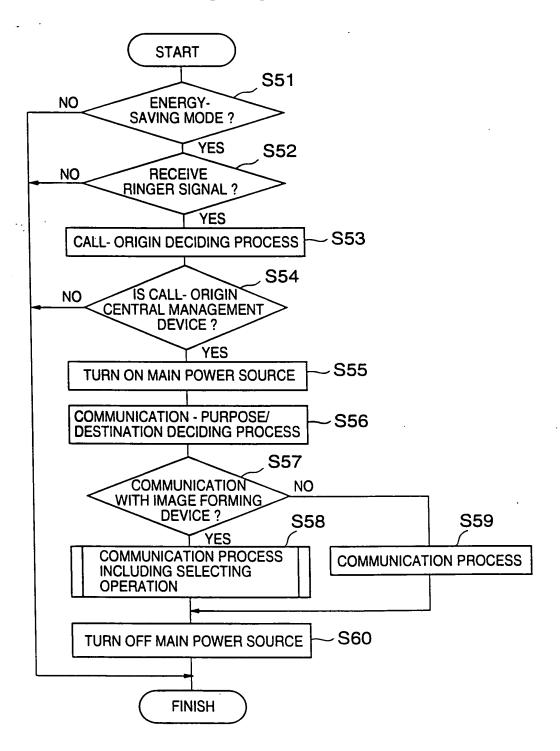


FIG.24A

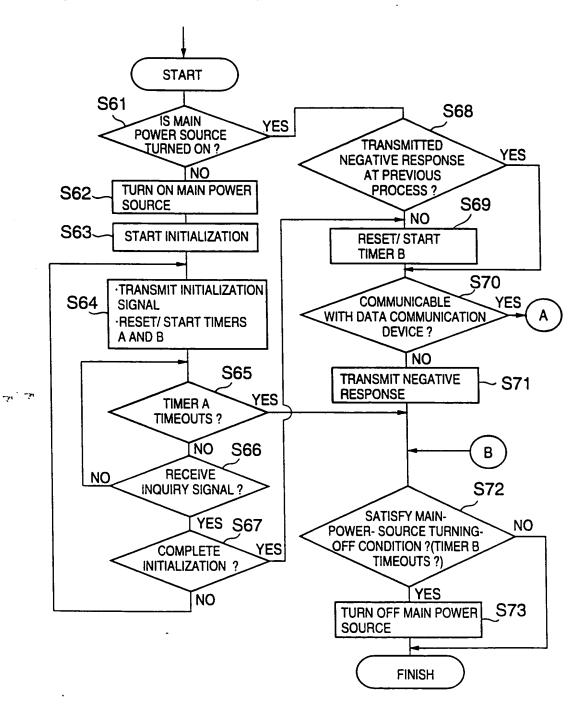


FIG.24B

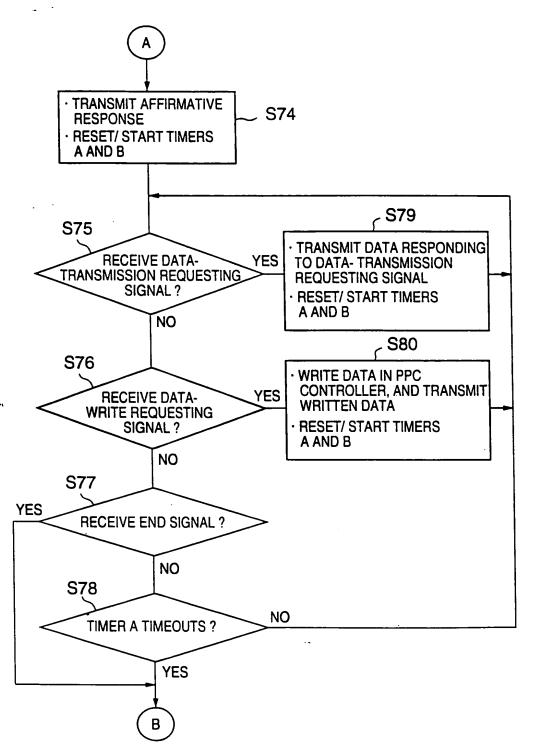


IMAGE FORMING DEVICE (PERSONAL I/F)	TURN ON MAIN POWER SOURCE	COMPLETE INITIALIZATION	REQUEST SIGNAL 1 TEXT 1 REQUEST SIGNAL 2 TEXT 2 TURN OFF MAIN POWER SOURCE, AFTER FIXED PERIOD PASSES WHILE IMAGE FORMING DEVICE IS UNUSED, OR MAIN SWITCH IS TURNED OFF
DATA COMMUNICATION DEVICE IMAGE FORN	SELECTING SIGNAL INITIALIZATION SIGNAL INOLLIRY SIGNAL	INITIALIZATION SIGNAL INQUIRY SIGNAL AFFIRMATIVE RESPONSE	TEXT 1 REQUEST SIGNAL 2 TEXT 2

FIG.26

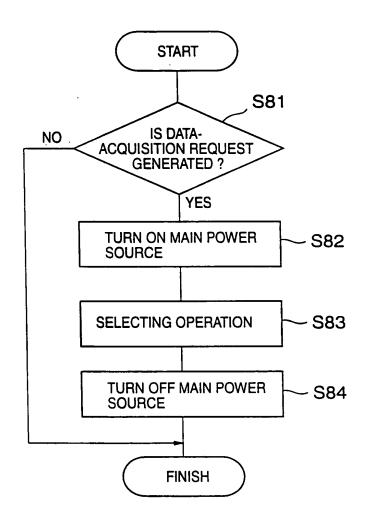


FIG.27

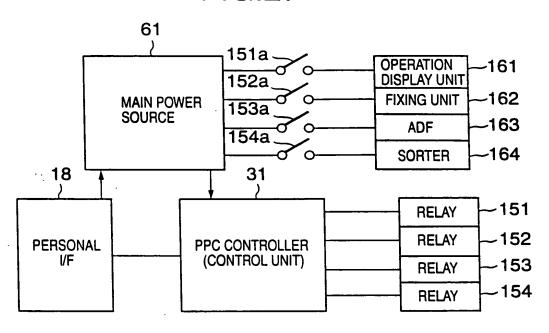


FIG.28

UNIT	SETTING	
OPERATION DISPLAY UNIT	OFF	
FIXING UNIT	ON	
ADF	OFF	CETTING
SORTER	OFF	SETTING

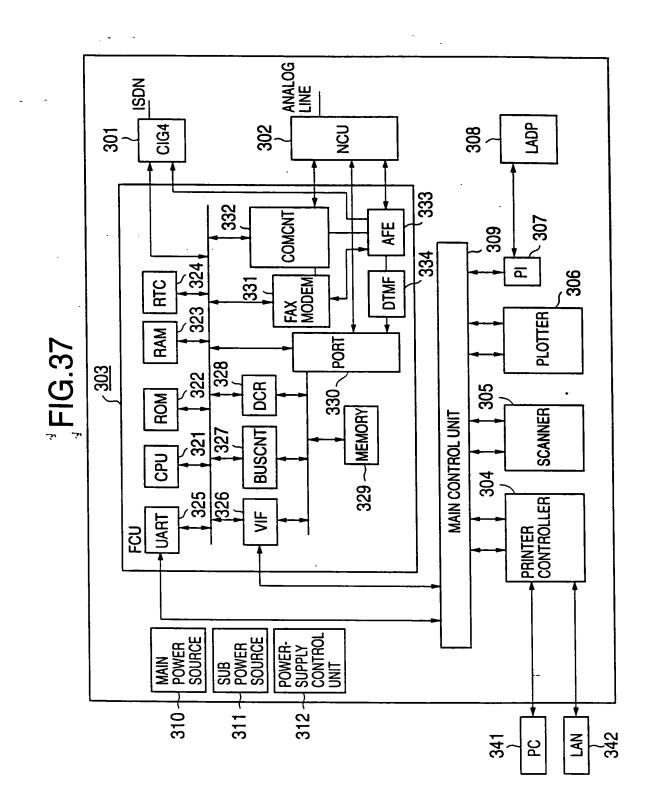
PERSONAL I/F **PPC CONTROLLER** DATA COMMUNICATION **DEVICE SELECTING SIGNAL** ACK **REQUEST FOR FIXING** REQUEST FOR FIXING TEMPERATURE **TEMPERATURE ACK RETURN FIXING TEMPERATURE FIG.29** EOT **POLLING SIGNAL** RETURN FIXING TEMPERATURE **ACK EOT** POWER- SOURCE CONTROL **FIG.30 REQUEST FOR FIXING** SYN SOH NUMBER STX ETX **LRC TEMPERATURE** INFORMATION BIT PROCESS INFORMATION NOTE 0 **OPERATION UNIT 1:ON,0:OFF FIXING UNIT** 1:ON,0:OFF **FIG.31 ADF** 1:ON,0:OFF 3 SORTER 1:ON,0:OFF 4 5 6 INFORMATION ABOUT REQUEST FOR **FIG.32** NOTE FIXING TEMPERATURE 5101105020000 POWER- SOURCE **FIG.33** CONTROL SOH NUMBER SYN STX ETX LRC INFORMATION **DRUM CURRENT** FIG.34 **COPY SHEET FRONT END**

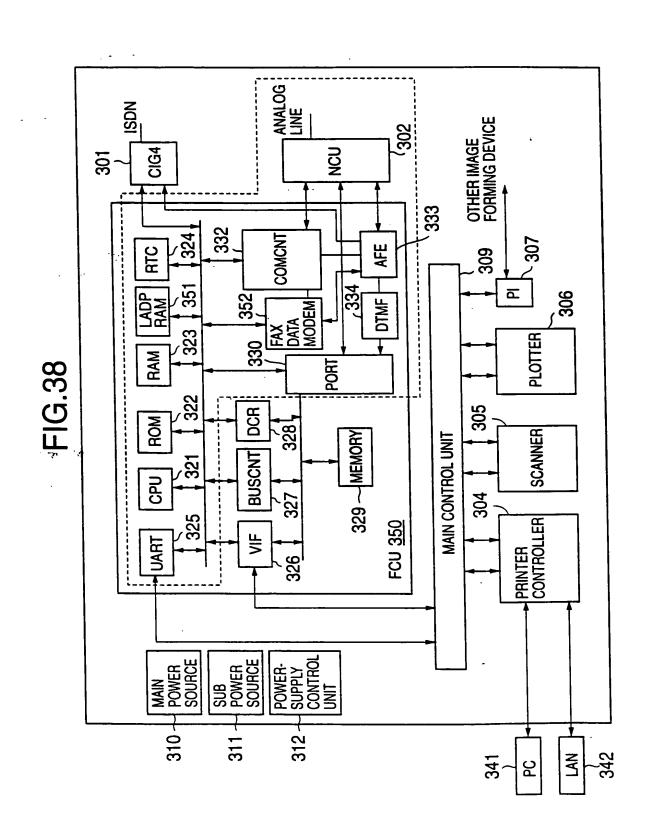
(IMAGE ON END SIDE BECOMES DARKER)

DATA COMMUNICATION DEVICE 7 _ 107 POWER- SOURCE CONTROL UNIT SERIAL COMMUNICATION CONTROL UNIT SERIAL COMMUNICATION CONTROL UNIT SERIAL COMMUNICATION CONTROL UNIT **58** 201 201 IMAGE FORMING DEVICE 2 IMAGE FORMING DEVICE 1 1 | GNG 424 - 75+ GND -18 18

FIG.35

MAIN- POWER SOURCE TURNING ON SIGNAL POWER- SOURCE CONTROL UNIT DATA COMMUNICATION DEVICE 7 107 -211 SERIAL COMMUNICATION CONTROL UNIT STARTUP-SIGNAL DETECTING UNIT BATTERY 101 STARTUP SIGNAL SERIAL COMMUNICATION -CONTROL UNIT SERIAL COMMUNICATION CONTROL UNIT IMAGE FORMING DEVICE 2 IMAGE FORMING DEVICE 1 18 8

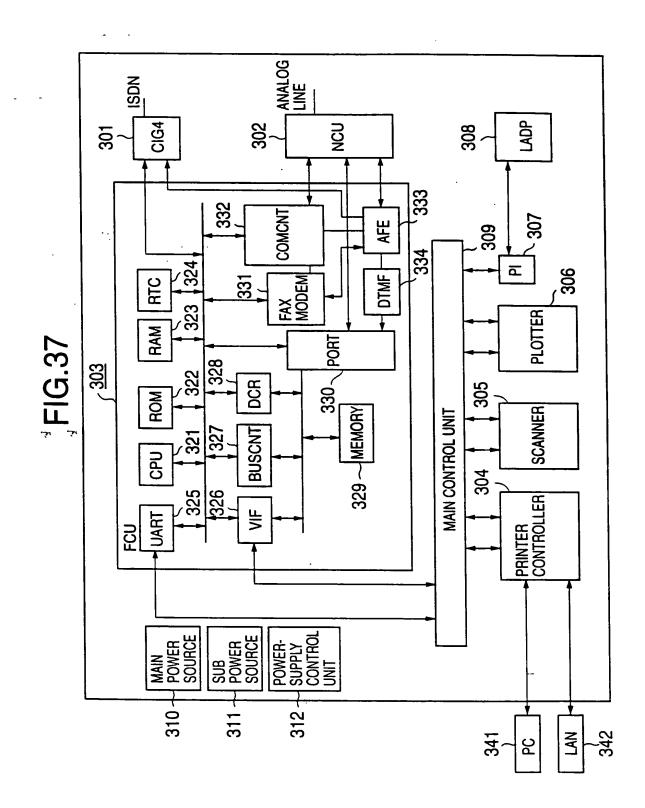


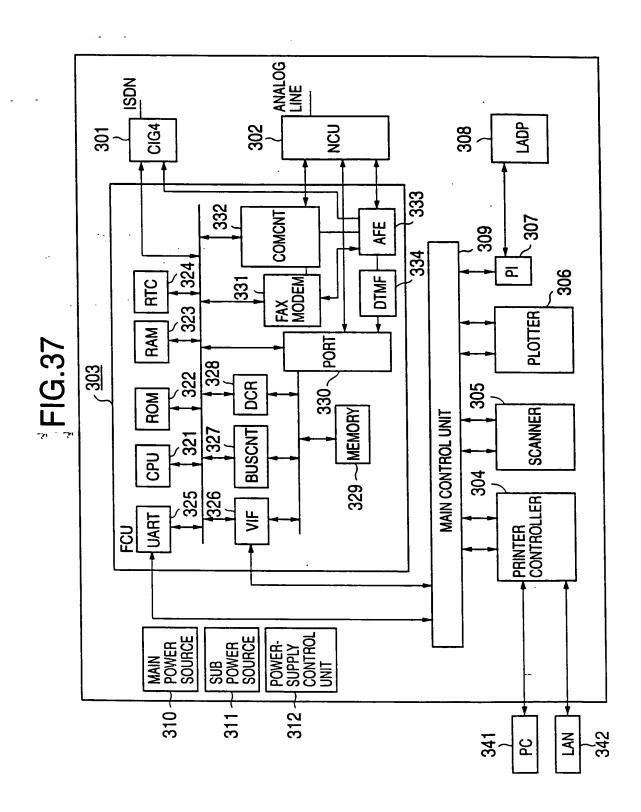


MAIN- POWER SOURCE TURNING ON SIGNAL POWER- SOURCE CONTROL UNIT DATA COMMUNICATION DEVICE 7 .107 -211 SERIAL COMMUNICATION CONTROL UNIT STARTUP. SIGNAL DETECTING UNIT BATTERY 101 STARTUP SIGNAL SERIAL COMMUNICATION CONTROL UNIT SERIAL COMMUNICATION CONTROL UNIT 28 28 IMAGE FORMING DEVICE 2 IMAGE FORMING DEVICE 1 18 <u>~</u>

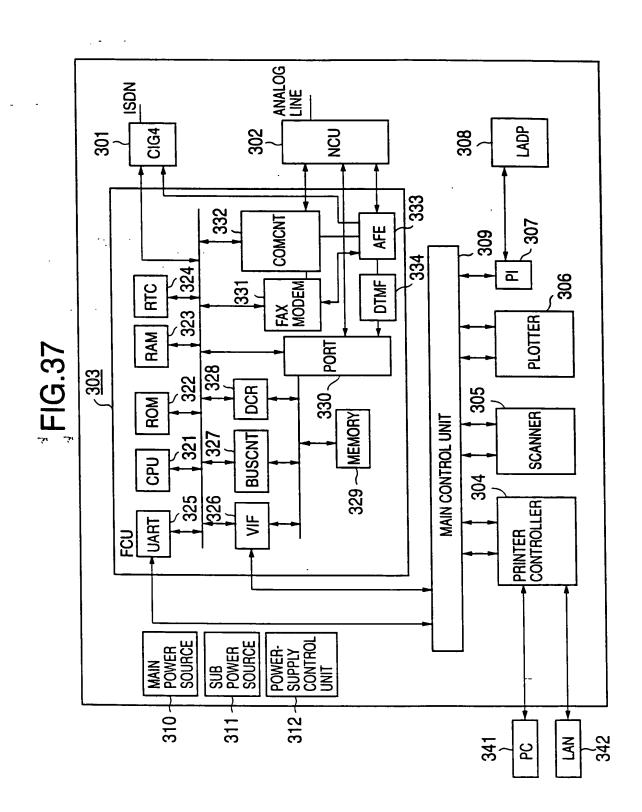
MAIN- POWER SOURCE TURNING ON SIGNAL POWER- SOURCE CONTROL UNIT DATA COMMUNICATION DEVICE 7 107 -211 SERIAL COMMUNICATION CONTROL UNIT STARTUP-SIGNAL DETECTING UNIT BATTERY 10 STARTUP SIGNAL SERIAL COMMUNICATION – CONTROL UNIT SERIAL COMMUNICATION CONTROL UNIT 28 IMAGE FORMING DEVICE $\underline{2}$ IMAGE FORMING DEVICE 1 ()

MAIN- POWER SOURCE TURNING ON SIGNAL POWER- SOURCE CONTROL UNIT DATA COMMUNICATION DEVICE 7 ,107 -211 SERIAL COMMUNICATION CONTROL UNIT STARTUP-SIGNAL DETECTING UNIT BATTERY 101 STARTUP SIGNAL SERIAL COMMUNICATION CONTROL UNIT SERIAL COMMUNICATION CONTROL UNIT 28 IMAGE FORMING DEVICE $\underline{2}$ IMAGE FORMING DEVICE 1 18 ---<u>~</u>

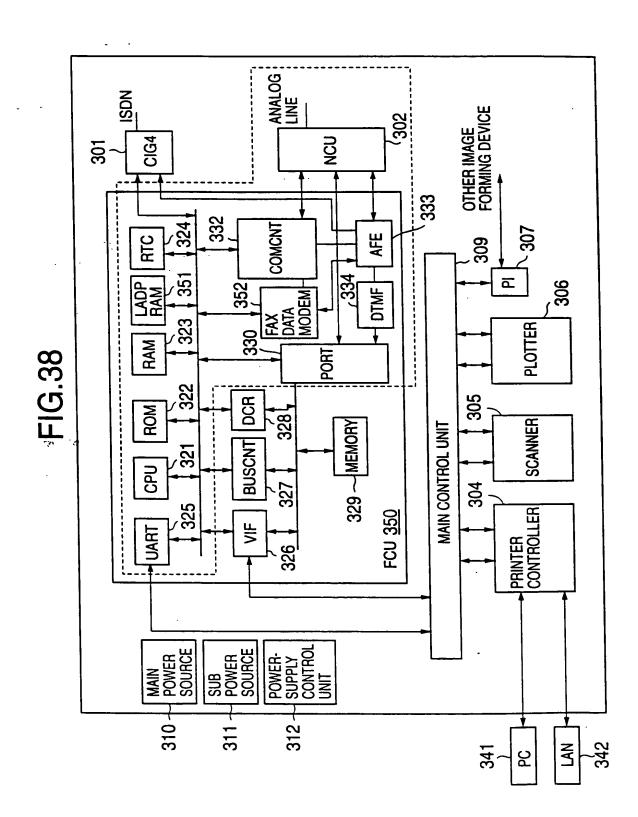




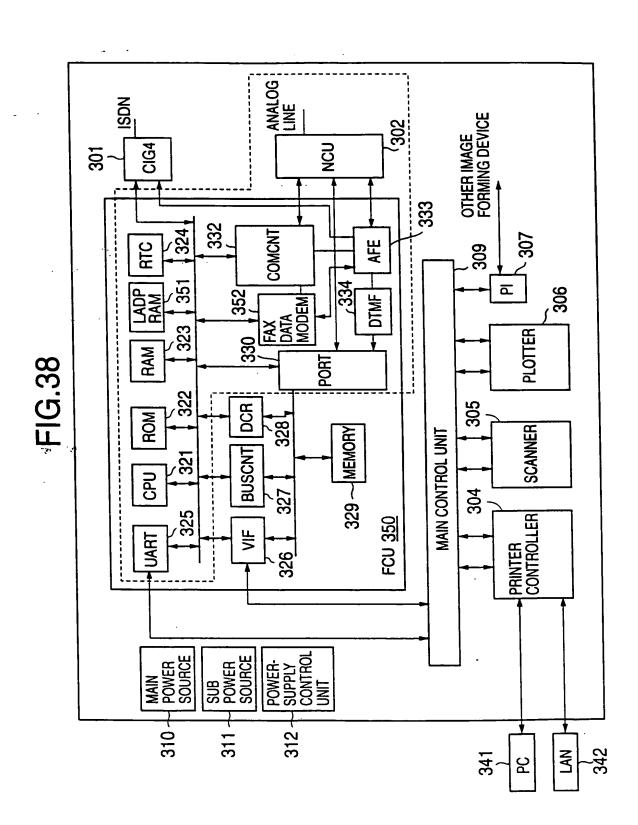
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